STATE OF MICHIGAN

Orange file - Municipal landfills



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US EPA RECORDS CENTER REGION 5

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Ms. Andrea McLaughlin, Hazardous Site Control Division United States Environmental Protection Agency 401 M Street, S.W. Washington, D.C. 20460

Dear Ms. McLaughlin,

Staff of the Michigan Department of Natural Resources have reviewed the June, 1993 draft of the Presumptive Remedy for CERCLA Municipal Landfill Sites Quick Reference Fact Sheet and have the following comments.

General: In general we are supportive of a presumptive remedy approach to municipal landfills. We agree that, for the foreseeable future, it will necessary to contain the majority of the waste volume for most of these sites on site. We agree that common elements of the remedies for these sites will include a cap, leachate collection and treatment, landfill gas collection and treatment, source area groundwater control and institutional controls. In addition long term operation and maintenance will be a necessary element of these remedies.

We believe that for this presumptive remedy approach to be implemented in a manner which is protective of public health and the environment, there must be a provision that sites will be evaluated adequately to determine the need to further tailor the remedy where site specific conditions warrant. tailoring may include construction of slurry walls, waste consolidation and/or removal and treatment of hot spots.

We do not believe that this presumptive remedy approach is appropriate to use * at sites where it is likely that a high percentage of the waste came from industrial sources. Such sites warrant a more in depth investigation and evaluation of cleanup alternatives.

More Specific page by page comments follow.

Page 2, column 1, paragraph 1: Please insert "of all of the waste" between "treatment" and "is" on the 4th line. There are a number of records of decisions for Municipal Landfill type sites in Michigan and other states which call for treatment of hot spots as a practical and necessary action to provide protection to human health and the environment. Examples in Michigan include the Rasmussen Site, the Forest Waste Site, the Metamora Landfill Site and the Ionia City Landfill Site.

Page 2, column 1, paragraph 2: The decision of whether a particular site is suitable for the presumptive remedy approach should be made jointly with the state. If there is a disagreement based on site specific information that indicates the presumptive remedy may not be protective, then a more definitive investigation, and if warranted based on the investigation results, a more definitive feasibility study, should be required. Such a decision, which goes directly to remedy selection, should be made with public input as well. Notification after the decision is made is inadequate involvement for the State and the public.

Page 3, column 1, paragraph 2: Wherever there is information which suggests that hot spots may exist, or for some other reason the presumptive remedy may need to be augmented to be protective, basic nonintrusive investigative techniques should be used to either confirm that more definitive investigation is needed or to confirm that the presumptive remedy is likely to be protective and can proceed. Examples of nonintrusive techniques which have been used with success when applied appropriately include geophysical studies such as magnetometer/gradiometer surveys to locate drum disposal locations, and soil gas surveys to identify liquid disposal areas. Such nonintrusive techniques are inexpensive and relatively quick to perform. The decision to characterize hot spots should be based on existing information, or information obtained from such nonintrusive investigations. This fact sheet should require such an approach where appropriate.

Page 4, column 1, paragraph 2: The discussion of site characterization should include direction that where existing information suggests that hot spots are likely to be present that nonintrusive investigative techniques should be used to determine if a more definitive source area investigation is warranted.

Page 5, column 1, paragraph 1, last sentence: It will also be necessary to include provisions for perpetual operation and maintenance actions at these sites to ensure the continued integrity of these containment systems.

Page 5, Highlight 4: Since investigation of the source area is generally discouraged as part of the presumptive remedy process, it is inappropriate to assume that Subtitle D closure requirements are appropriate for these sites, unless there is no information that would indicate that there was disposal of industrial or hazardous type wastes at the site. To the contrary, Subtitle C closure requirements should be considered to be generally appropriate at municipal landfills which are listed on the National Priority List. The very nature of these sites, which have scored above 28.5 in the Hazard Ranking

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System should warrant the more protective closure requirements of Subtitle C unless it can be demonstrated that a less stringent remedy will be protective. This is further supported by the discussion on page 6, column 1 regarding the nature of municipal landfills.

Page 6, column 1, paragraphs 1 and 2: Although it is true that in many cases industrial wastes and municipal wastes are distributed randomly throughout a landfill, it is also often the case that industrial wastes such as drummed wastes or liquids were disposed of in "batches" in specific areas of a landfill. If such locations can be easily located through the use of nonintrusive investigative techniques, which can then be further characterized, it can then be determined if the integrity of the containment system would be threatened if the waste is left in place. This fact sheet should require the gathering of such basic information in the investigative phase if existing information indicates the likelihood of concentrated waste disposal.

Page 6, column 1, paragraph 2 and Highlight 5: It is impossible to determine if a hot spot is considered principal threat waste, if a hot spot is large enough that remediation will significantly reduce the threat posed by the overall site or if the integrity of the containment system will be threatened if the waste is left in place until after hot spot characterization. These questions are pertinent to whether the presumptive remedy might need to be augmented, not to whether hot spots should be characterized. Also, an extremely large hot spot may not be reasonable to consider for removal, however characterization of such hot spots should still proceed since further augmentation of the presumptive remedy is likely to be needed in such cases based on the severity of the contamination present. Appropriate questions to be answered prior to hot spot characterization are questions 1 and 3. With regard to question 1, evidence of the presence and approximate location of the waste should be based on prior existing information or information developed during the initial stages of the investigation.

Page 6, column 2, example Site B: Site B is an excellent example of a site where nonintrusive investigative techniques should be used to confirm either the presence or absence of discrete locations of buried drums. The determinations that 175 drums in a 70 acre landfill are not a significant threat to the integrity of the containment system or will not significantly affect the threat posed by the overall site cannot be made without a determination regarding the presence or absence of discrete burial locations. For example, if the 175 drums are disposed of in one area of the site and contain liquid industrial waste, they would pose a significant threat to the remedy. Depending on the condition of the drums and site hydrogeology, it is likely that this threat would only be discovered through the use of the above investigative techniques and subsequent characterization or general failure of the remedy. Such investigative tools should be considered a part of the presumptive remedy process whenever existing information indicates the likely presence of hot spots.

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With the incorporation of the above comments, we could fully support the use of the presumptive remedy process for municipal landfills. Without adequate screening for hot spots where they are likely to exist, we cannot.

Thank you for the opportunity to comment on this draft fact sheet.

Sincerely,

William F. Bradford, Chief

Superfund Section

William Br

Environmental Response Division

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cc: Bruce Means, US EPA Kris Hoellen, ASTSWMO